

ABSTRACT

[0065] A thermal compensating desmodromic valve actuation system for opening and closing at least one valve of an engine having a cam assemblage and a driving mechanism for reciprocal movement operably connected to said cam assemblage. The cam assemblage includes a cam mechanism for rotational movement and the driving mechanism also being operably connected to the at least one valve of the engine to move the at least one valve between a valve closed position and a valve open position and between the open position and the closed position in a manner directly related to the rotational movement of the cam mechanism. In addition, mechanisms are provided for adjustably controlling the movement of the at least one valve in order to provide a variable amount of opening of the at least one valve in the open position, and for compensating for the thermal conditions of the engine causes valve stem elongation and contraction. The opening and closing of the at least one valve takes place without the intervention of a spring action.

29481-101CIP-PatApp-091503.doc